

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,573	3 03/17/2004		P. Nick Lawrence	066300.0144	5971
5073	7590	06/27/2005		EXAMINER	
BAKER BO		•	WILLIAMS, HOWARD L		
2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980				ART UNIT	PAPER NUMBER
				2819	
				DATE MAILED: 06/27/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/803,573	LAWRENCE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Howard L. Williams	2819				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on	•					
2a) ☐ This action is FINAL . 2b) ☒ This	s action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1,3,5,7,9,11,13 and 14 is/are rejected. 7) Claim(s) 2,4,6,8,10 and 12 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>20 July 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
A						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	nte				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>031704</u> .	5) ☐ Notice of Informal P 6) ☐ Other:	atent Application (PTO-152)				

Application Number: 10/803,573 Your Reference: 066300.0144

Art Unit: 2819

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,3, 5, 7, 9, 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al (US 5300931 A).

At the outset, it is noted that while the terminology "correlithm objects" does not appear to have gained wide use in literature and publications; the application and particularly the claims define a correlithm object as a bit set representing a point in N-dimensional space; in other words, a vector, to which the description draws repeated analogies.

Lindsay discloses a system for memory based vector quantization. Sets of bits (P1, P2, ... P8) are received at the inputs V1 and V2 (fig. 2) and subsequently applied to vector quantizers (29, 31; fig. 2) and to a look-up table (34; fig. 2). The identification of the correlithm object and encoding of the bit set steps and means seem to be part and parcel to overall look-up table process. Imposing (application page 10) is broadly defined as combining and recovering by any suitable technique and Lindsay is seen to disclose one in column 5 lines 1-15. Lindsay also includes vector decoding as part of the encoding process.

3

Application Number: 10/803,573

Your Reference: 066300.0144

Art Unit: 2819

Claims 2, 4, 6, 8, 10 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cole (US 4891823 A), Kilbank (US 20040208315 A1), Li et al. (US 5883981 A), and Smith (US 5216750 A) each disclose vector coding systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard L. Williams at telephone number (571) 272-1815.

6/24/05

Voice: (571) 272-1815

Howard L. Williams

Primary Examiner

Art Unit 2819